



MAN, MACHINE AND MISHAP

While rescue teams comprising NDRF, fire and rescue personnel, city commandos and police are on their feet doing their best to help victims and pull out survivors, the lack of gadgets or equipment puts a spanner in rescue operations

C. S. KOTTESWARAN | DC CHENNAI, JULY 2

Although nearly ₹300 crore has been allocated for disaster management in Tamil Nadu since 2010, Chennai is still not equipped to handle an emergency like the Porur building collapse.

It has taken authorities five days to rescue 27 people and exhume over 47 bodies and they are still working to reach out to more. Not surprising when the Chennai corporation does not have even basic equipment like floating water pumps, reflective jackets, searchlights, high-end generator sets, gas cutters for metal, wood and concrete, movable tents or inflatable lighting tower systems for use in emergencies.

The city also lacks a uniform emergency communication wireless system integrating the police, fire force, corporation and ambulance services, a digital radio system that can work in tunnels and underground railway

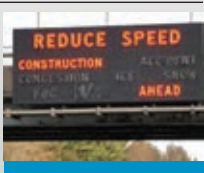
Tower Light
This equipment helps to light up surrounding areas that are otherwise dark and with no illumination and is supported by a generator.



ELECTRIC CUTTER
An equipment that is useful in cutting metal, concrete, shutter and other similar metal objects.



Digital Board
It can be installed in highways and arterial roads informing motorists to divert in case of accidents and disasters.



Communication Phone
In times of dealing with crisis situations it becomes vital to maintain communication with all stakeholders involved in the disaster response.



Thermal Camera
Also called an infrared camera, it is a device that indicates a human presence using infrared radiation as a result of the heat generated from the victim's body.



those trapped and also allowing the victims to communicate," Mr Madhavan explains.

Recalling that in 2003 the corporation budget had called for establishing a wireless network among its field staff, but shelved it later due to high input costs, former deputy mayor, Karate R. Thiagarajan, says this was a mistake as in case of disasters a wireless network can speed up rescue operations.

"In 2005, when a building collapsed in Santhome it took a long time to contact corporation officials for the rescue operation. Local bodies need to be more technologically advanced," he stresses.

When contacted, a corporation official said that the civic body was equipped with earth-movers, gas cutters and tree cutter to deal with disasters, but admitted it lacked equipment like generators, searchlights and concrete cutters that were essential too in such situations.



Wood Cutter
A handheld light weight instrument that can cut any wood or branches of a tree. It is useful during storm that uproots trees.

lines, and highway digital notification boards that can divert motorists from a disaster site. "Multi-purpose cameras and life detectors are now an essential part of disaster

management and they don't cost very much," says Mr Anoop Madhavan, founder, Survival Instincts, an NGO working on disaster response and search operations.

The Porur accident being a structural collapse disaster requires high expertise and equipment assistance, according to him. "For instance, certain life detectors support a micro-

phone, a speaker and LED lights and can rotate 360 degrees.

Their cameras with extended probes can send images when inserted into rubble, helping to identify

NDRF gadgets helpful
DC CORRESPONDENT CHENNAI, JULY 2

Hi-tech tools, like victim location equipment and breaching system, heart beat detectors and thermal imaging cameras have come to the aid of the National Disaster Response Force (NDRF) officials in the search and rescue operation of victims at the building collapse site at Mouliwakkam.

"Our advanced life detectors send out electromagnetic waves and alert the rescue personnel," commandant M.K.Verma said. The victim location equipment and breaching system which comes with a 'camera with an extended probe' can go through small openings. As we clear the rubble, using crow bars and other cutting equipment, we send in the victim location camera, which has a rod extending up to 4 m with a camera attached to it which is capable of rotating 360 degrees. It enables two-way communication and the rescuers can hear sounds from victims and can talk back to them as the device comes fitted with a microphone and a speaker, an NDRF official said.

The NDRF also uses thermal imaging cameras, the infrared rays being capable of penetrating through rubble and concrete while the

e images can be seen on the screen attached to it.

"We also have two sniffer dogs trained specially to spot a human," said NDRF Commandant M. K. Verma. "It is not the equipment alone. Personnel from several state agencies, including the NDRF, Fire and Rescue, police commandos and home guards, are working relentlessly to rescue the victims," he said.

KIN WAIT ENDLESSLY

DC CORRESPONDENT CHENNAI, JULY 2

Relatives of M. Murugan (32) from Virudhunagar district are anxiously waiting outside the emergency centre of Sri Ramachandra hospital hoping to hear some news - either of his survival or death.

"We have been here for the last five days. We had hope till Tuesday but now it's not possible for him to be alive," said relative Muthukrishnan. Murugan's wife Shanmuga Ganapathy has no clue about Murugan's condition. "We do not want to inform her. She still hopes Murugan will come home," said her brother Azhagumuthu.

Watching the building collapse news, Murugan's 62-year-old father



Relatives of M. Murugan at Sri Ramachandra Medical Centre on Wednesday.

Mookandi came to Chennai and after seeing a dead body being taken out from the debris of the construction site, he fell ill. "He is in the hospital now. He collapsed thinking his son too would be crushed to death," said Azhagumuthu.

On Saturday, Murugan had called his mother at about 3 pm and said he would get his wages and return home to visit the Melmaruvathur temple. Murugan and his wife have two daughters.

Please find my pregnant wife, says survivor Mahesh

UMA KANNAN | DC CHENNAI, JULY 2

They were a happily married couple for just six months. Their joy had known no bounds when they came to know that the bride had conceived three months ago. Along with their family members, Mahesh (23) and Sujatha (21) came to Chennai to work at the construction site only 10 days before the building was fated to collapse. While Mahesh was rescued 62 hours after the collapse, Sujatha's fate has not been so good. She is still somewhere under the rubble.



My wife said she was thirsty and wanted water immediately. At one point, we both felt we would not be able to come out alive
— MAHESH, Survivor waiting for wife



Power went off due to heavy rain. Instead of chitchatting with others, I went to the opposite flat when the building collapsed. I had to drink my urine to survive
— PRAKASH, Plumber from Odisha

Lying restlessly on his bed at Sri Ramachandra Medical Centre, a shocked and exhausted Mahesh said on Wednesday morning, "My wife and I were together under the debris till an hour before I was rescued (Mahesh was pulled out alive at about 7 am on Tuesday). "My wife said she was thirsty and wanted water immediately. At one point, we both felt we would not be able to come out alive," said Mahesh. However, destiny had other plans. Another collapse under the rubble during the rescue operation may have separated them. Suddenly, Mahesh saw lights above him and he was pulled out soon.

His relative K.P. Raju said as Mahesh was in the state of shock he could not speak and inform the rescue workers that his wife was lying there along with him. He was taken to the hospital and only a few

hours later he could say, "Where is my wife Sujatha? Please find her". Mahesh married Sujatha after falling in love with her and they came to Chennai as her sister Sunitha, father Suryanarayan and mother Lakshmi were working here. Both Sunitha and Lakshmi were rescued and Suryanarayan is still missing. "We can't go near Lakshmi. She is always crying," said Raju.

Another miraculous survivor, plumber Prakash (25) from Odisha, came to Chennai only on May 21 and he was pulled out after struggling in the debris of the building for 72 hours. Prakash had worked in Abu Dhabi for two years before his

childhood friend Amar had called him to Chennai.

"I was working on the seventh floor along with my friend and other workers. Power went off due to heavy rain. Instead of chitchatting with others, I went to the opposite flat when the building collapsed. I had to drink my urine to survive. Only after coming to the hospital did I come to know about the death of my dear friend Amar," cries Prakash. "I lost him. He was just a few feet away," said the youngest of the three brothers whose fingers still carry traces of cement reminding him of the trauma. Seeing his picture in the newspapers, he pointed out to say his name was not Yukesh or Vikash, it is Prakash. And he lives to say it.

DATA OF FUNDS ALLOCATED TO STATE GOVERNMENTS THROUGH NATIONAL DISASTER MANAGEMENT		
	Tamil Nadu	Andhra Pradesh
2010-11	293.52	508.84
2011-12	308.2	534.28
2012-13	323.61	560.99
2013-14	339.79	589.04
2014-15	356.78	618.49
Total	1612.9 (₹ in crores)	2811.64



NO THREAT OF INFECTION: OFFICIALS

AISHWARYA VP | DC CHENNAI, JULY 2

Reports of workers being injected with medicines has been spreading in the area around the collapsed building in Mouliwakkam, but people living or working near the site of the collapsed building in Mouliwakkam need not fear of the spread of any disease from bodies. It is only as a precaution in the event of injury that Tetanus Toxoid is being administered to those rescue workers who have received any cuts from the debris during the rescue operation, health department officials said.

Director of Public Health, Dr K Kulandaisamy explained, "People may have misunderstood that TT is administered to the rescue workers in order to prevent the spreading of infection from the dead bodies. The medicine is not administered mandatorily to all involved in the operations. It is given only to those workers who sustained injuries while removing the debris

and clearing the iron rods and so on."

Deputy director of health Dr K Krishnaraj said that no infection or disease would spread from dead bodies.

He also clarified doubts in the minds of the public that the body of a person who had died in an accident or who had committed suicide will not spread any infection as long as the person did not have any disease. Krishnaraj said TT was being administered to more than 60 persons who received fresh injury during the rescue operation.

Dr Kulandaisamy said that mask and gloves were being distributed to the rescue workers due to dust generation while using machines to clear the garbage.

Gloves are also being distributed to sanitary workers who are handling bleaching powder and phenyl at the site.

More than 2,000 set of masks and gloves were collected from the Directorate of Public Health, Rajiv Gandhi Government General Hospital and Sri Ramachandra Medical College for use in the rescue operations.

FOR SUSHILA, PORUR WAS 2ND DISASTER

DC CORRESPONDENT CHENNAI, JULY 2

"Rather than living with the injury and pain I should have died at the site," said Sushila, one of the survivors of the Porur building collapse. She is receiving treatment at the Rajiv Gandhi Government General Hospital.

For Sushila it is second time lucky. She recalled she had survived another building collapse in Sriperumbudur three years ago, but there was a very few casualties and injuries, as the incident took place at 3.00 am.

As the worker was involved in construction work on the 11th floor of the building, rescuers were able to take her out on the day of the collapse itself (Saturday) and sent to the Government Kilpauk Hospital from where she was referred to RGGGH. She was treated for her fractured right leg. As she also complained of severe back pain, an X-ray was taken on Wednesday and treatment would begin.

Sushila (24) of Vijayanagar from Andhra Pradesh was deserted by her husband and she and her son live with her parents. She had come to Chennai along with her aunt Saraswathi and uncle Sankar a few years ago.

Tears rolled down her face as she recalled the building

collapse. "We stayed on the ground floor of the site and on the day of the accident my aunt was working on the 10th floor, while my uncle was assigned the 11th floor. I was also on duty on the 11th floor," she said.

"When the building began to collapse, we sensed something was wrong and everybody on the floor cried out and ran. But, in no time, the accident took place. I could hear people crying for help. When a man next to me was rescued, I remembered crying for help with a high voice twice and the hand of a policeman offered help. That was what I remembered, I then fell unconscious," she noted. Sushila's aunt and uncle were found on Sunday but they were dead.

"I don't even know the language. I came here to work to look after my three-year-old son and parents. My life has changed totally within four days of the injury. I have lost all my confidence. I don't know whether I can ever go back to work as a normal person again," she confessed.



Tireless presence of 108, men

Jackson Jose | dc Chennai: July 2

S. Krishna, K. Babu and their 108 ambulance team have been at the collapse site since day one, part of one of the greatest tragedies that have shaken Chennai in recent times. As personnel drawn from various agencies continue their efforts to rescue victims among the mangled steel rods and broken concrete, the duo wait. Sixteen such ambulances have been deployed at the collapse site with access to green corridors created by traffic police. The access allows them to move faster. Krishna, the pilot says, "It is three kilometers from here to Ramachandra; we cover the distance in six minutes." The three gates leading to the building have three 108 ambulances deployed near the entrance. Babu adds, "We got a call to come at 10:30 on Saturday when we were stationed at the Governor's house and since then we have been at this spot, working in shifts."

In addition to white 108 ambulances, 18 mortuary vans to carry dead bodies are also at the site. Babu, the technician, says, "We brought out two people alive, but another was dead by the time we reached the hospital. As the person is brought out by the rescue teams, the victim is checked for vital signs including BP and then taken into the ambulance."